

**Notice of Allowability**

Application No.

09/940,623

Applicant(s)

HORIE, DAISAKU

Examiner

Dennis Rosario

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to AF amt. 08/15/2005.
2. ☒ The allowed claim(s) is/are 18-21, 23-26, 28 and 30-32.
3. ☒ The drawings filed on 29 August 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 08/29/01
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

JOHN MANCINI  
PRIMARY EXAMINER

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney of record, Edward J. Wise, Registration No. 34,523 on August 25, 2005.

The application has been amended as follows:

Claim 21, line 1 change "(Previously Presented)" to -(Currently Amended)-.

Claim 32, line 8 change "relevant" to -lightness component in a-.

Claim 32, line 8 insert -of the original image- after "portion".

***Response to Amendment***

1. The after final amendment was received on August 15, 2005. Claims 18-21,23-26,28,30-32.

***Claim Objections***

2. Due to the amendment, the objection to claims 21 and 31 is withdrawn.

***Response to Arguments***

2. Applicant's arguments, see after final amendment, filed 8/15/2205, with respect to claims 18-21,23-26,28,30-32 have been fully considered and are persuasive. The rejection of claims 18-21,23-26,28,30-32 has been withdrawn.

Regarding claims 18,23 and 28, applicants properly point out, stating on page 11, lines 2-5, "However, it is clear that there is no disclosure that a processor determines the edge that continuously extend from a first end of the extracted original region as **corresponding to folds in the original image.**"

Instead, Ricard discloses a user and not a processor that determines the claimed region and mentions that the area is "relatively long and narrow" in col. 9, lines 46,47.

Hence, and in view of applicants arguments, amendment and in combination with all of the other elements of the claims, claims 18,23 and 28 are allowable over the closest prior art of Ricard (US Patent 6,731,795 B1).

Regarding claims 20,25 and 32, applicants properly point out, stating on page 11, lines 18022, "However, what claim 20 is directed to is that an edge is already detected by the edge detecting unit and then the processor determines whether or not this edge is a fold by determining whether regions on opposing sides of the edge (two regions separated by the edge) have attributes that are the same or not."

Instead, Ricard discloses a "user" in col. 6, line 15 and not a processor determining an edge or "rectangular area" in col. 6, line 16 that corresponds to a fold. In addition, Ricard discloses a set of criteria that define an edge where one of the criteria is a "difference...between pixels in the suspect area [or the claimed edge] and

neighboring pixels [or the claimed regions]" in col. 9, lines 45-47, which is a criteria that is different as claimed. Ricard does not suggest determining a difference between two neighboring pixels or the claimed regions to determine whether the neighboring pixels are the same or not.

Hence, and in view of applicants arguments, amendment and in combination with all of the other elements of the claims, claims 20,25 and 32 are allowable over the closest prior art of Ricard.

Regarding claims 21,26 and 32, applicants properly point out, stating on page 12, line 3, "Independent claim 21 is more specific with respect to this subject matter [of claims 20,25 and 32]..."

Ricard does not teach the limitations of claims 21,26 and 32 of selecting an edge. Ricard may appear to be teaching the limitations of claims 21,26 and 32 in fig. 5, but figure 5 is directed towards a correction process after a fold is selected.

Hence, and in view of applicants arguments, amendment and in combination with all of the other elements of the claims, claims 21,26 and 32 are allowable over the closest prior art of Ricard.

Claim 31 is allowed for the same reasons as claim 21.

Claims 19,24 and 30 are allowed for the same reasons stated in a previous office action of 2/22/2005, all of which is incorporated herein.

**Conclusion**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Rosario whose telephone number is (571) 272-7397. The examiner can normally be reached on 6-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571) 272-7695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DR

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JOSEPH MANCUSO  
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